

Serial No. 10/044,801
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Art Unit: 1755

Pre-amendment application claims

1. A composition comprising particulate apatite having an average apatite crystal size of less than 250 nm.
11. A composition comprising particulate apatite having a surface area of at least 40 m²/g.

Proposed Amendment in this reissue application (only amended claims are shown)

581. (proposed amendment to incorporate recitation of claim 587) A composition, comprising particulate apatite having an average apatite particle size of less than 1 μ m, an average apatite crystal size of less than 150 nm and a surface area of at least 40 m²/g, wherein the particulate apatite undergoes apatite phase decomposition of less than 10% when exposed to conditions of at least 1300 °C for at least 2 hours.

620. (proposed amendment to incorporate recitation of claim 621) An article comprising an apatite structure having a dimension of at least 0.5 cm, a density of at least about 98%, a compressive strength of at least about 500 MPa, and an average XRD crystal size of less than 250 nm, wherein the apatite structure undergoes phase decomposition of less than 10% when exposed to conditions of at least 1300 °C for at least 2 hours.